

# Grouping of Adjacent Media in SDP

draft-jennings-mmusic-adjacent-grouping-03

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# Why the CLUE work is doing something different

- Coming up in 3 slides ... patience grasshopper

# Solution for Linear Displays



21 million-pixel display in IAC building

- SDP has no way of saying which video stream goes on which display
- This drafts uses RFC 5888 to provide left-to-right order of video streams

v=0

O=Laura 289083124 289083124 IN IP4 example.com

c=IN IP4 192.0.2.1

t=0 0

a=group:ADJ s1 s2

m=video 52886 RTP/AVP  
a=rtpmap:31 H261/9000

a=mid:s1

m=video 54132 RTP/AVP 31

a=rtpmap:31 H261/9000

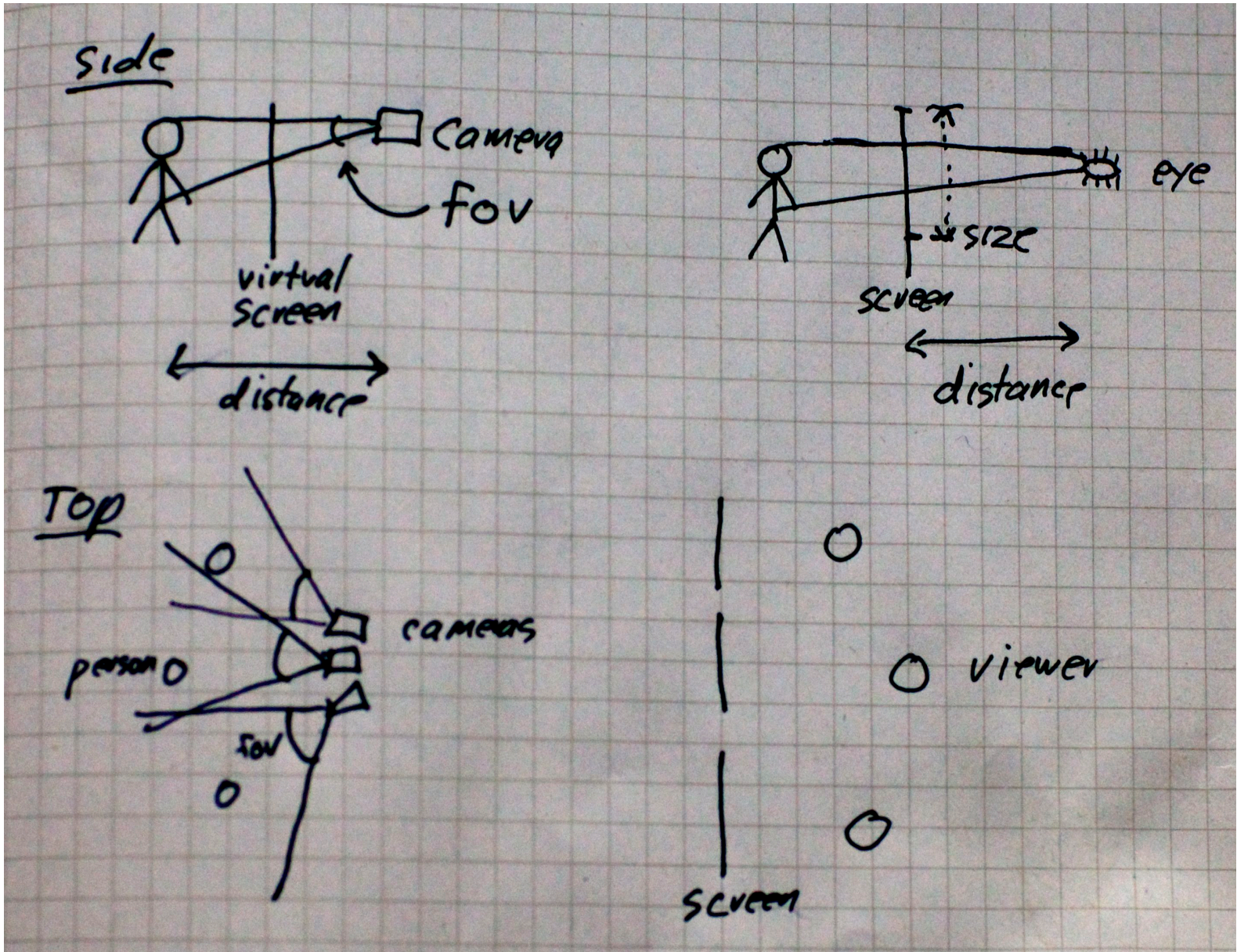
a=mid:s2

Indicates order of streams is s1 then s2 going left to right

# SDP Offer/Answer Model Considerations

- The offer contains the sender's desired layout
- The answer can contain the desired layout of the streams that the answerer will be sending to the system that sent the offer
- If this is one-way media only, then the answer will be empty

# Clue & How It's Different

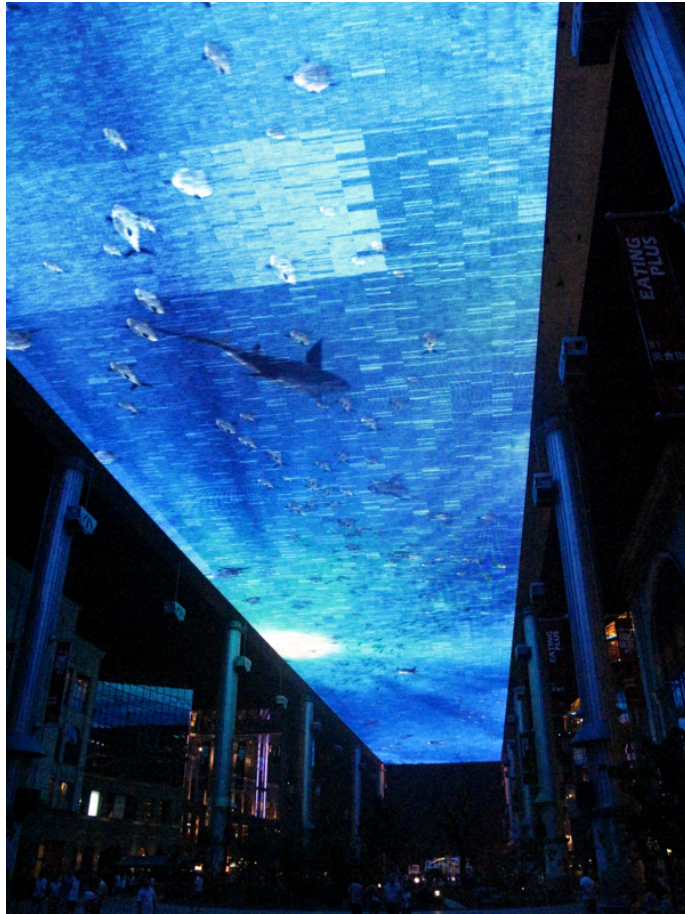


# Next Steps

- What harm does this draft cause?

# Backup Slides

# Large Video Walls



By Troy (thewamphyri)  
<http://www.flickr.com/photos/thewamphyri/3930149308/>

- It is increasingly common to use combine a large number of video streams to form a large virtual display
- Photo on left is 6000 m<sup>2</sup> screen with 14.5 million pixels in Beijing
- Today SDP can signal multiple video streams, but
- **SDP has no way to say which stream goes on which display for a system like this**



# Solution for Grid Displays



- For display of information on an array of displays, this draft adds an attribute to indicate the size of the grid

v=0

display draft for data attribute array of  
v=0 1920x1080 2x2  
indicate the size of the grid

o=Laura 289083124 289083124 IN

6x9wbl6'cow

a=media-grid-dims:2x2

Indicates a 2x2 grid

a=media-grid-dims:2x2

s2

m=video 52862137 s4

AVP

a=rtmp://31.142.60.31

31

By Cha già José  
<http://www.flickr.com/photos/chagiajose/3397564727/>

# The 'media-grid-dims' Attribute

```
media-grid-dims-line = "a=media-grid-dims:" rows "x" columns  
rows = %X3J                                     CRLF  
rows = %    -39 *DIGIT  
columns = %x31-39 *DIGIT
```

- If the attribute does not exist, we assume a 1 x N horizontal linear layout
- There can be more than one adjacent media group in an SDP description